

## CLAIMS

We claim:

1. A composition comprising an isolated and purified peptide defined by an amino acid sequence selected from the group of SEQ ID NO: 14 and SEQ ID NO: 15, and portions thereof.
2. The composition of Claim 1, wherein said peptide is specific for the C5a receptor.
3. Antibodies produced from the peptide of claim 1.
4. A method, comprising:
  - a) providing;
    - i) neutrophils,
    - ii) a purified peptide having an amino acid sequence selected from the group of SEQ ID NO: 14 and SEQ ID NO: 15, and portions thereof; and
  - b) mixing said neutrophils with said peptide under conditions such that the ability of said neutrophils to bind full-length human C5a peptide is reduced.
5. The method of Claim 4, wherein said neutrophils are human neutrophils.
6. The method of Claim 4, wherein said neutrophils are murine neutrophils.
7. The method of Claim 4, wherein said neutrophils are rat neutrophils.
- 8.. A method, comprising:
  - a) providing;
    - i) neutrophils,
    - ii) a purified peptide having an amino acid sequence selected from the group of SEQ ID NO: 14 and SEQ ID NO: 15, and portions thereof; and
  - b) treating said neutrophils with said peptide under such conditions that C5a activation of said neutrophils is inhibited.
9. The method of Claim 8, wherein said neutrophils are human neutrophils.
10. The method of Claim 8, wherein said neutrophils are murine neutrophils.
11. The method of Claim 8, wherein said neutrophils are rat neutrophils.